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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/073,799             | BAILEY ET AL.       |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Timothy Edwards, Jr.   | 2635                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview of March 11, 2005.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ The drawings filed on 11 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brent Knight on March 11, 2005.

The application has been amended as follows:

#### **IN THE CLAIMS:**

1. A method for improved telemetry of a data signal from a first location to a second location using a wireline having at least three conductors, comprising:

(a) connecting one end of said wireline to a data transmittal means at said first location and the other end of said wireline to a data receiver means at said second location, said data transmittal means having first and second output terminals, said data receiver means having first and second input terminals, wherein

(1) at least two of said conductors are connected to said first output terminal of said data transmittal means and to said first input terminal of said data receiver means, wherein said two of said conductors are not directly adjacent to each other and

(2) at least one of said conductors is connected to said second output terminal of said data transmittal means and to said second input terminal of said data receiver means;

- (b) generating said data signal at said first location;
- (c) transmitting said data signal from said data transmittal means through said wireline to said data receiver means; and
- (d) receiving said data signal at said second location.

17. A method for improved telemetry of a data signal from a first location to a second location using a wireline having at least three conductors, comprising:

(a) connecting one end of said wireline to a data transmittal means at said first location and the other end of said wireline to a data receiver means at said second location, said data transmittal means having first and second output terminals, said data receiver means having first and second input terminals, wherein

(1) at least two of said conductors are connected to said first output terminal of said data transmittal means and to said first input terminal of said data receiver means, wherein said two of said conductors are not directly adjacent to each other and

(2) at least one of said conductors is connected to said second output terminal of said data transmittal means and to said second input terminal of said data receiver means;

- (b) generating said data signal at said first location;
- (c) digitizing said data signal;
- (d) modulating said digitized data signal to frequency modulated carrier signals;

(e) transmitting said frequency-modulated carrier signals from said data transmittal means through said wireline to said data receiver means;

(f) receiving said frequency-modulated carrier signal at said second location; and

(g) demodulating said frequency-modulated carrier signals to recover said data signal.

23. A data telemetry system for use in transmitting a plurality of data signals from a first location to a second location, comprising:

(a) a multi-conductor wireline extending from said first location to said second location, said multi-conductor wireline containing at least three conductors;

(b) data transmittal means at said first location for  
(1) converting said plurality of data signals into frequency modulated carrier signals, each of said frequency modulated carrier signals having a different center carrier frequency in the range of from about 1kHz to about 100 kHz, (2) summing said frequency modulated carrier signals to create a data input signal, and (3) transmitting said data input signal through said multi-conductor wireline, said data transmittal means having first and second output terminals; and

(c) data receiver means at said second location for  
(1) receiving said data signal from said multi-conductor wireline, (2) separating said data input signal into said frequency modulated signals, and (3) demodulating said frequency modulated signals to obtain said plurality of data signals, said data receiver means having first and second input terminals;

(d) wherein two of said conductors are connected at one end to said first output terminal of said data transmittal means and at the other end to said input terminal of said data receiver means, with said two of said conductors not being directly adjacent to each other and at least one of said conductors is connected at one end to said second output terminal of said data transmittal means and at the other end to said second input terminal of said data receiver means.

The following is an examiner's statement of reasons for allowance: in the environment of transmitting telemetry data from a downhole wellbore location to the surface using a wireline the closes prior art Pritchett '750 fails to teach or suggest the connection of a wireline as disclosed by fig 6 of the present application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

1. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (571) 272-3067. The examiner can normally be reached on Tuesday-Friday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Mondays.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (571) 272-3068.

Art Unit: 2635

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or fax to:

(703), 872-9314 (for formal communications intended for entry)

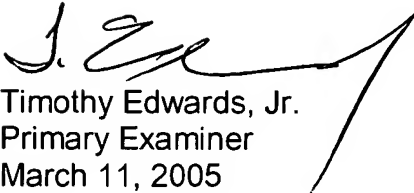
Or:

(for informal or draft communications, please label "PROPOSED"

or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor, (Receptionist).

  
Timothy Edwards, Jr.  
Primary Examiner  
March 11, 2005